

Title: Emergency Implementation of Knowledge Management System to Support a Bioterrorism Response

Authors:

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Abstract:

In a public health emergency, it becomes necessary for public health agencies to provide timely, accurate and useful information to the community. During the anthrax attacks, the Public Health Practice Program Office in the Centers for Disease Control and Prevention implemented a knowledge management (KM) system to respond to an increased number of inquiries from public health officials, first responders, and health care professionals as well as the general public. While it is possible to successfully implement a knowledge management system quickly in a crisis situation, additional challenges to sustainability may result from shortchanging the normal decision-making channels.

Project Description:

In response to the anthrax attacks of 2001, the Public Health Practice Program Office in the Centers for Disease Control and Prevention implemented a knowledge management system to respond to an increased number of inquiries from public health officials, first responders, health care professionals and the general public. Due to the volume and diversity of the questions received, a Commercial Off-the-Shelf (COTS) knowledge management system, *AskMe Enterprise*, was adapted to capture knowledge and facilitate the exchange of knowledge between emergency operations staff officers, laboratorians, and other subject matter experts. The systems enabled knowledge sharing to

take place via a question and answer exchange allowing users to search a knowledgebase of frequently asked questions and related resources. If necessary, the user could search for appropriate subject matter experts that could respond to the inquiries. The knowledge system was implemented as a 60 day pilot to support the activities of the Health Alert Network (HAN) Emergency Command Center. The knowledgebase was setup with 80 categories with 183 Frequently Asked Questions, 128 resources and 255 expert profiles related to public health preparedness and response to include anthrax, smallpox, biological and chemical agents and others. A total of 29 problems/features were identified - 15 were fixed or were unable to be duplicated, six were identified for pending releases and eight required customization.

The system was fully adapted and implemented within 30 days. The implementation of this pilot knowledge management application indicated that a taxonomy could be developed and a system could be adapted quickly using COTS software. Command Center users were able to respond with more relevant answers and related resources utilizing the benefits of the probabilistic matching feature of the search engine. Overall satisfactions by users were high. However, for continued benefit, organizational support to sustain the currency of the content is required if the need arises to use the knowledgebase again. Sustainability cannot be achieved if implementation is dependent upon the need to implement immediately in an ad hoc fashion.